

ABSTRACT

A lithium ion capacitor having a high capacity retention at the time of continuous charge at a high temperature and excellent durability. The lithium ion capacitor includes a positive electrode, a negative electrode and an aprotic organic solvent electrolyte solution of a lithium salt as an electrolytic solution. The positive electrode active material is a material capable of reversibly supporting lithium ions and/or anions, a negative electrode active material is a material capable of reversibly supporting lithium ions, the negative electrode and/or the positive electrode is doped with lithium ions so that the potential of the positive electrode is at most 2.0 V after the positive electrode and the negative electrode are short-circuited, and the electrolytic solution contains vinylene carbonate or its derivative.